

12AE7

Dual Triode

With Medium-Mu Unit and Low-Mu Unit

9-PIN MINIATURE TYPE

For Automobile Radio Receivers Operating
Directly from 6-Cell Storage Batteries

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage range (DC). 10 to 15.9 volts

*For longest life, it is recommended that the heater
be operated within the voltage range of 11 to 14 volts.*

Current (Approx.) at 12.6 volts 0.45 amp

Direct Interelectrode Capacitances (Approx.):

	Unit No. 1	Unit No. 2	
Grid to plate	3.9	3.4	$\mu\mu\text{f}$
Grid to cathode and heater. . .	4.7	4.2	$\mu\mu\text{f}$
Plate to cathode and heater . .	0.75	0.85	$\mu\mu\text{f}$

Characteristics, Class A₁ Amplifier:

With heater voltage of 12.6 volts

	Unit No. 1	Unit No. 2	
Plate Voltage	12.6	12.6	volts
Grid Resistor	1.5	1	megohms
Amplification Factor.	13	6.4	
Plate Resistance (Approx.). . . .	3150	985	ohms
Transconductance.	4000	6500	μmhos
Plate Current	1.9	7.5	ma

Mechanical:

Operating Position. Any

Maximum Overall Length. 2-3/16"

Maximum Seated Length. 1-15/16"

Length, Base Seat to Bulb Top (Excluding tip) . . 1-9/16" $\pm$ 3/32"

Diameter. 0.750" to 0.875"

Dimensional Outline See *General Section*

Bulb. T6-1/2

Base. Small-Button Noval 9-Pin (JEDEC No. E9-1)

Basing Designation for BOTTOM VIEW. 9A

Pin 1 - Plate of
Unit No. 2

Pin 2 - Grid of
Unit No. 2

Pin 3 - Cathode of
Unit No. 2

Pins 4 & 9 - Heater of
Unit No. 2

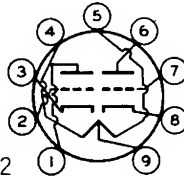
Pins 5 & 9 - Heater of
Unit No. 1

Pin 6 - Plate of
Unit No. 1

Pin 7 - Grid of
Unit No. 1

Pin 8 - Cathode of
Unit No. 1

Pin 9 - Heater Tap



RADIO CORPORATION OF AMERICA
Electron Tube Division
Harrison, N. J.

DATA
3-61

12AE7

AUDIO DRIVER

Values are for Each Unit

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE	16 max.	volts
GRID VOLTAGE:		
Positive-bias value	0 max.	volts
PLATE DISSIPATION	1 max.	watt
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode .	16 max.	volts
Heater positive with respect to cathode .	16 max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance	1.5 max.	megohms
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